seems to be a matter of pure chance. As regards his geographical distribution, the author appears to have followed, as a rule, a tolerably safe pilot; but sometimes he ventures upon a little compression of his own and falls into error. For instance, he gives "Southern Europe" as the habitat of the Rock-Thrush, a bird which breeds on the Continent as far north as the latitude of London.

XXII.—Letters, Extracts, Notices, &c.

WE have received the following letters, addressed "to the Editors of 'The Ibis'":—

Sirs,—I have had a poor season for collecting this year, as business has occupied all my time, but I spent one interesting day in a salt-marsh. Trunialis militaris bred here this year in considerable numbers; the nests (similar to those of T. defilippii) were placed under tufts of high grass on high land, and well concealed. The eggs are three in number, large in size, and of a bluish white speckled with pale purple or reddish, and blotched or lined with dark purple or reddish. The Shoveler of this country (Spatula platalea) nests on high ground, but close to the water: the nest is well concealed among herbage, and composed of dry grass lined with down. The eggs are seven in number, clongated in shape, and of a creamy colour. Elanus leucurus was uncommon, but a few, probably birds of last year, remained here during October. Gelochelidon anglica, of which I sent home an adult specimen in September (see above, p. 169.—Edd.) I found breeding here this season. Its nest consists of a slight hollow in the ground, where it has trampled down the coarse grass. The eggs are three in number, large for the size of the bird, and of an olive, or grey, or yellow-brown colour, spotted and blotched with brown and light and dark grey.

In an extensive but shallow salt lake, dotted with numerous grassy islands and mudbanks, I and a friend spent an interesting afternoon. On the largest mudbank were many nests of the South-American Flamingo (*Phæni*-

copterus ignipalliatus), all huddled together, made of mud, 18 inches high, and rounded like a pillar, with a basin at the summit. There were 500 Flamingoes flying or wading about. All the other mudbanks and a few islands were crowded with nests of Larus maculipennis and their young in hopeless confusion. Further on we found the grassy islands occupied by L. cirrhocephalus and an occasional Shoveler and Pintail Duck, and the furthest island was crowded by innumerable Terns, screaming and fluttering over their nests, which are placed close to each other. Judging by the many addled and scattered eggs, they must disturb each other enormously. It was curious to note how all the species of Gulls and Terns, although nesting together, keep each to their corner, and do not allow the others to trespass on their breedingspot.

Yours &c.,

A. H. HOLLAND.

Estancia Sta. Elena, Halsey, F.C.O., Buenos Ayres, January 27th, 1897.

SIRS,—You will know the name of a countryman of mine, Mr. B. Schmacker, from several papers written by Mr. Styan in 'The Ibis.' Now, this gentleman has recently died in Japan, and has left his splendid collection of Chinese birds to the Bremen Museum. Of about 760 specimens nearly 300 are the originals of Mr. Styan's descriptions, as, for instance, the rare and unique Arboricola ardens.

The remainder, more than 400 specimens, have been confided to my care and study, to be named and catalogued. Perhaps this information may be acceptable to the readers of 'The Ibis.'

Yours, &c., G. Hartlaub.

Bremen, March 3rd, 1897.

New Experiments on Protective Coloration.—At the meeting of the American Ornithologists' Union, held at

288

Cambridge, Mass., on Nov. 10th, 1896 (as we learn from 'Science'), Mr. Thaver showed the following curious experiment. He placed three sweet potatoes, or objects of corresponding shape and size, horizontally on a wire a few inches above the ground. They were covered with some sticky material, and dry earth from the road on which they stood was sprinkled over them, so that they would be the same colour as the background. The two end ones were then painted white on the underside, and the white colour was shaded up and gradually mixed with the brown of the sides. When viewed from a little distance, these two end ones, which were white below, disappeared from sight, while the middle one stood out in strong relief, and appeared much darker than it really was. Mr. Thayer explained that terrestrial birds and mammals which are protectively coloured have the underparts white or very light in colour, and that the colour of the underparts usually shades gradually into that of the upper parts. This is essential in order to counteract the effect of the shadow. which otherwise, as shown by the middle potato, makes the object abnormally conspicuous, and causes it to appear much darker than it really is. In the case of Mr. Thaver's experiment, some of the witnesses could hardly believe that the striking difference in the visibility of the three potatoes was entirely due to the colouring of the underside, and Mr. Thaver was asked to colour the middle one like the two others, in order that the effect might be observed. Mr. Thayer complied with the request, painting the underside of the middle potato white, and shading the white up into the sides, as in the case of the others. The effect was almost magical. The middle potato at once disappeared from view. A similar experiment was tried on the lawn. Two potatoes were painted green, to resemble the green of the grass above which they were suspended. One was painted white on the underside, and at once became invisible when viewed from a little distance, while the other showed plainly and seemed very dark, the shadow, superadded to the green of the underside, making it remarkably conspicuous. The experiments were an overwhelming success.

The Rosy Bullfinch in Holland.—Mr. Blaauw writes to us that at a recent bird-show held at Utrecht he saw a living female (or young male) of the Rosy Bullfinch (Carpoducus erythrinus) exhibited. This bird had been captured in a net near Zwolle on Nov. 12th, 1896. This is the third recorded occurrence of the Rosy Bullfinch in the Netherlands.

The Chaffinch of Timbuctoo.—We have all heard of the Cassowary of Timbuctoo, but it has remained for a learned French traveller, who has recently visited that city, to discover a Chaffinch there. This is how M. Dubois describes the bird in 'Timbuctoo the Mysterious,' as he sits in the veranda of his hired house looking over a courtyard, and "chaffs" with his native friends:—

"Chaffinches with red throats and tails, and the lively little lizards who shared the apartments with me, joined the party. They frolicked in our midst with the utmost effrontery. The lizards ran about all over my guests, and the birds flew round them, fluttering and singing incessantly. No one but myself took any notice of them, however, so accustomed is Timbuctoo to their numbers and caprices."

Now what is the "Chaffinch' of Timbuctoo? Probably Emberiza saharæ? Now that our neighbours on the opposite side of the Channel have taken possession of Timbuctoo we should like to have from them rather more definite information about its birds.

The "Operculum" in Ratite Birds.—In a recent number of 'Nature' (vol. liii. p. 279) attention is called to the discovery by Prof. Nassonow (Zool. Anz. xviii. p. 487) of an operculum in Struthio, and to the fact that the same structure had been previously noticed in Apteryx by Prof. T. J. Parker (Phil. Trans. 182 B, p. 31). This "operculum" is a fold of skin which grows over and gradually obliterates the embryonic gill-clefts in the Amphibia. Prof. Parker justly observes in the paper cited that "the retention of so

obviously amphibian a character as the opercular fold in the embryo of Apteryx appears to be a feature of very considerable morphological importance." He had not met with any record of its occurrence in other Sauropsida. It is well known that the late Prof. W. K. Parker dwelt in later years more upon the amphibian than the reptilian characters of birds; he compared, for instance, the curious "os uncinatum," connecting in a few types the ectethmoids with the palatine, to the attachment in the tadpole of the palato-pterygoid cartilages with the skull. These facts seem to favour this attitude with regard to birds, and to emphasize the low position in the series of the Struthious division.

The Parasitism of Cassidix oryzivora.-Dr. Goeldi (in reply to the remarks made, 'Ibis,' 1896, p. 586) calls our attention to the fact that he has already indicated the parasitic habits of Cassidix oryzivora in his 'Aves do Brasil' (p. 284). The "Meiro," as it is called in the Serra dos Orgãos, he there states, introduces its eggs into the nests of other birds, and does not incubate itself. Moreover, in December 1892, a nest and two young birds were brought to him as belonging to the "Japu," Ostinops cristatus. He remarked that one of the fledglings had no yellow in the tail-feathers. As the birds grew older it became manifest that one of the supposed "Japus" was a young Cassidix oruzivora, while the other was that of Ostinops cristatus. Dr. Goeldi has also sent us an article containing further particulars on this subject, which we shall publish in 'The Ibis' for July. In the meanwhile we may state that there can be no doubt that the priority of the discovery of the parasitism of Cassidix rests with Dr. Goeldi.

The Generic Name of the Swifts.—As is well known, Micropus (although in use for a genus of plants) has of recent years been put forward by some systematists as the correct generic term for the Swifts, to be used instead of Cypselus (see our remarks, 'Ibis,' 1894, p. 131). It appears,

however, that Micropus is not likely to enjoy a long reign. In the last number of the 'Ornithologische Monatsberichte,' Dr. Reichenow advocates a return to the still more ancient term Apus, of Scopoli, for the Swifts. Apus, of Scopoli (1777), has hitherto been passed over, because it has been stated that the same name had been proposed by Pallas in 1776 for a genus of Crustacea. But it now seems that this was an error, and that the term Apus is not to be found in Pallas's writings. It was used by Schäffer in 1756, but that was in pre-Linnean days, and does not bar its subsequent employment. The advocates of unmitigated priority will therefore, no doubt, proceed to call the Common Swift "Apus apus," and the family "Apodida": Dr. Reichenow suggests "Macropterygidæ," but we do not see how this could be justified. We venture the opinion that it would be more reasonable not to change the name Cupselus, which has been in constant use for the Swifts for many years. and is certainly neither the name of a plant nor of a Crustacean. We all know what is meant by "Cypselus," and this is the earliest name for the Swifts to which there is no serious objection.

XXIII.—Obituary.—Herr H. Gätke, Major C. E. Bendire, and William Graham.

Heinrich Gätke.—We greatly regret to announce the death, on January 1st, of this distinguished Honorary Member of the British Ornithologists' Union, in his home on the Oberland, in sea-girt Heligoland, at the advanced age of 84.

Herr Gätke was born on the 19th of May, 1813, in a small town of the Mark of Brandenburg, and it was his desire to become a marine painter which first induced him to visit the island, where eventually he married and settled down for the remainder of his life. Subsequently, during the time of the English occupation, he held an important official post under the Governor. It was his outdoor work as a painter which brought him into touch with the